

Work Order ID 62907

Wednesday, October 13, 2010 9:04:24 AM



Page 1

Item ID: D350-636-015

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 10/22/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 10/13/10

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4168

A

IIN-D350-636

H

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-015 CHG 001

Salinas

CK Pw CL 11/01/06

B62907

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00



Skidtubes

0.00

Skidtubes

Memo

Skidtubes

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting

5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as per dwg D4168.

6- Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE

8- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole.

9-Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D4168. Open up holes for ground handling and detail C to 0.500" (8 holes per side)

10-Open up holes of Detail A to 0.297" (total of 2 holes per side) and .210" (total of 1 hole per side)

10-10-14

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R Aluminum Rod batch: ☐

12-Grind welds flush as per Dwg D4168

M11505 BE 10/10/14
M115778
DP 10-10-15

120



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

8/21/14

Memo

0.00

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

8/10/14

Memo

0.00

40

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Page 4

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Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

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Page 5

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Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg D4168.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D4168.

3- Open float hole to 0.500" (4 per side)

Open wearplate holes to size as per dwg (4 holes per sides)

4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D4168 (welding instructions on sheet 8)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R ☐ ☐ ☐ Sikaflex-291 batch: 115/14 ☐ ☐ ☐
exp. date: 10/11/05

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1 & QSI004

(welding instructions on sheet 8)

A/R ☐ ☐ ☐ Aluminum Rod batch: 115778 BE 10/11/08

9- At section AJ-AJ drill out x-bolt spacer to 0.404"

BE 10/11/08

DP

10-11-4

BB 10/11/05

Dart Aerospace Ltd

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Page 6

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Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

10-Grind welds flush as per Dwg D4168

11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D4168

12-Deburr holes

170

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

10/11/11

BE 10/11/15

BE 10/11/15

10/11/15

10/11/15

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Page 7

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

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Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

M115091

Memo

0.00

Powder Coating

START TIME: 9:00
OVEN TEMPERATURE: 320°
FINISH TIME: 9:30

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Inspect for foreign object per QSI 024

205
Hand Finish
10/01/05

Wing Walk per dwg

N/A 11/01/05

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Page 8

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220

0.00



HandFinish

HandFinishing

Memo

Hand Finishing

1- Install inserts as per Dwg D4168

0.00

=> MU

11/01/05

1

Ø

230

0.00



HandFinish

HandFinishing

Memo

Hand Finishing

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: N/A

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168

SIKA FLEX 241

BATCH: 1115114

EXP DATE: 11/01

0.00

=> MU

11/01/05

1

Ø

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube
A/R 55-o-ring lube batch: 11114189

5-Coat all exposed fasteners with "LPS Procyon" batch: 11114596

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Page 9

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							
250 Packaging Packaging	Pick Kit Memo	0.00 0.00							
260 QC Quality Control	QC4- 100% Inspect kits for completeness Memo *****ensure antiseize is on AN8C21A bolts*****	0.00 0.00							

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Page 10

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-636-015 Location: <u>72</u> PPP rev: <u>12</u>								
280	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

10/11/0711/01/07MF
11-01-07

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Wednesday, October 13, 2010 9:04:28 AM

Work Order ID: 62907

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010**Required Date:** 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C34A		Purchased	No			230	Each	17.0000	1	1			
BOLT													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST353		17							
				115767		17							
AN3C36A		Purchased	No			230	Each	115.0000	4	4			
BOLT													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST353		115		1116239		x4			
				109771		10							
				115358		15							
				115518		40							
				115882		50							
AN3C37A		Purchased	No			230	Each	60.0000	1	1			
BOLT													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST354		60							
				114761		10							
				114801		50							

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Picklist Print

Wednesday, October 13, 2010 9:04:28 AM

Page 2

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Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

AN3C42A

Purchased

No

230

Each

104.0000

1

1



BOLT



10/1/08

Location

Loc Qty

Loc Code

ST354

104

106169

4

106176

100

D3490-1

Manufactured

No

230

Each

123.0000

4

4



Cross Bolt Spacer



Location

Loc Qty

Loc Code

LG

123

59424

3

61217

30

62450

90

D3490-3

Manufactured

No

230

Each

39.0000

4

4



Cross Bolt Spacer



4 BE 10/11/08

Location

Loc Qty

Loc Code

LG

39

60294

1

61218

1

62451

37

D3873-1

Manufactured

No

230

Each

95.0000

7

7



Bushing



7 BE 10/11/08

Location

Loc Qty

Loc Code

ST092

40

62197

40

ST093

55

57615

55

B63314

X7

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Shop Packet Print

Page 2

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Page 3

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Start Date: 10/13/2010

Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

D4154-041

Manufactured No

230

Each

3.0000

1

1



Wearplate Assembly *

B62711



11/01/05

Location

Loc Qty

Loc Code

FG

3

62196

3

D4170-1

Manufactured No

230

Each

8.0000

4

4



Bushing

Location

Loc Qty

Loc Code

LG

8

62251

8

D4171-1

Manufactured No

230

Each

0.0000

1

1



Bushing

D62710



11/01/05

MS21043-3

Purchased No

230

Each

2,564.000

5

5



Nut

Location

Loc Qty

Loc Code

FG

76

103691

76

ST301

2488

111383

23

112314

2465

45

W/O:		WORK ORDER CHANGES					
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Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0363R

Purchased

No

230

Each

5,796.000

9

9



Washer



11/10/105

Location

Loc Qty

Loc Code

ST297

5796

113524

146

113644

150

113889

500

114742

5000

29

NAS1515H3L

Purchased

No

230

Each

380.0000

4

4



WASHER



11/10/105

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

340

111819

94

113362

246

24

AN960JD816

Purchased

No

250

Each

127.0000

2

2



1/2" washer, Alum



11/11/105

Location

Loc Qty

Loc Code

ST348

127

106043

127

110

Each

14.0000

1

1

D2744

Manufactured

No



Cap



1

Location

Loc Qty

Loc Code

LG

14

59198

14

1 BE 10/10/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 13, 2010 9:04:28 AM

Page 5

10

Work Order ID: 62907



Parent Item: D350-636-015



Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010

Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

17.0000

1

1



Extrusion Bent

Location

Loc Qty

Loc Code

LG

17

①

61634

7

62594

10

Handwritten: 10-10-14

D2743

Manufactured No

160

Each

214.0000

8

8



Crossbolt Spacer

Location

Loc Qty

Loc Code

LG

214

50281

10

57953

2

59111

95

61844

107

Handwritten: 8 BE n/n/08

D2739

Manufactured No

160

Each

0.0000

1

1



350 I Beam

Handwritten: 62688

Handwritten: 1 BB 10/11/05

D3490-3

Manufactured No

160

Each

39.0000

4

4



Cross Bolt Spacer

Location

Loc Qty

Loc Code

LG

39

60294

1

61218

1

62451

37

Wednesday, October 13, 2010 9:04:28 AM

Shop Packet Print

Page 5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 13, 2010 9:04:28 AM

Page 6

Work Order ID: 62907

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010

Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

D3490-1
Cross Bolt Spacer

Manufactured No

160 Each

123.0000 4

4

Location

Loc Qty

Loc Code

LG

123

59424

3

61217

30

62450

90

ALS4-1032-225

Purchased No

230 Each

4,870.000 4

4

Insert

Location

Loc Qty

Loc Code

PK011

4870

110768

4870

D3492-041

Manufactured No

230 Each

17.0000 8

8

Plug Assembly

Location

Loc Qty

Loc Code

FP013

17

59114

1

61311

16

AN8C35A

Purchased No

230 Each

30.0000 1

1

BOLT

Location

Loc Qty

Loc Code

FP

1

110847

1

ST346

29

114442

5

115188

24

Wednesday, October 13, 2010 9:04:28 AM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11/01/05	230	Assemble with D2594-31 M61672 "o" rings	HL	11/01/05	14		S 11/01/06

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 13, 2010 9:04:28 AM

Page 7

Work Order ID: 62907

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010

Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

D3488-041

Manufactured No

230

Each

4.0000

1

1



Blade Fitting Assembly, LH



11/01/05

Location

Loc Qty

Loc Code

FP

1

53915

1

FP007

3

56052

3

x1

AN6C44A

Purchased

No

230

Each

85.0000

4

4



11/01/05

BOLT

Location

Loc Qty

Loc Code

FG

2

103964

2

ST344

83

111649

2

114653

1

114941

75

x1

115030

5

MS21083C8

Purchased

No

230

Each

99.0000

1

1



11/01/05

NUT

Location

Loc Qty

Loc Code

ST303

99

113845

5

114934

3

115594

41

115884

50

1116284

x1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 13, 2010 9:04:28 AM

Page 8

Work Order ID: 62907

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010

Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

D3631-1 Manufactured No

230

Each

387.0000

8

8



Washer



11/01/10

Location

Loc Qty

Loc Code

ST072

113

B63642

18

60755

113

ST076

274

52693

206

54388

68

AN960C10L Purchased No

NAS1149C0332

R

230

Each

29.0000

4

4



washer

11/15/12



11/01/10

Location

Loc Qty

Loc Code

ST245

29

107534

29

D2745 Manufactured No

230

Each

189.0000

8

8



Bushing



11/01/10

Location

Loc Qty

Loc Code

ST023

189

14

52311

5

59112

4

61203

76

61988

104

X AN960C816L NAS1149C08332R X Purchased No

230

Each

0.0000

1

1



WASHER

11/14/15



11/01/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 13, 2010 9:04:28 AM

Page 9

Work Order ID: 62907

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010

Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

D3492-043

Manufactured No

230

Each

35.0000

8

8



Plug Assembly



all 11/10/10 PTO = 2

Location

Loc Qty

Loc Code

FP
54682
FP013
59117
59190
61842

2
2
33
1
4
28

B63996

xs

AN3C6A

Purchased No

230

Each

261.0000

4

4



BOLT



all 11/10/10

Location

Loc Qty

Loc Code

ST351
111982

261
261

634.0000

4

x4
4

MS21043-6

Purchased No

230

Each

634.0000

4

4



NUT



all 11/10/10

Location

Loc Qty

Loc Code

ST301
112314

634
634

44.0000

2

x4
2

D3493-1

Manufactured No

250

Each

44.0000

2

2



Washer



11/1/75

Location

Loc Qty

Loc Code

ST062
61672
ST065
60873

40
40
4
4

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11/01/05	230	Assemble with NAS 1611-013 / M115B12 "O" rings	MM	11/01/05	18		8 11/01/05

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 13, 2010 9:04:28 AM

Page 10

Work Order ID: 62907

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 10/13/2010

Required Date: 10/22/2010

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

250

Each

99.0000

1

2



NUT



11/1/10 SP

Location

Loc Qty

Loc Code

ST303

99

113845

5

114934

3

115594

41

115884

50

AN8C21A

Purchased

No

250

Each

53.0000

2

2



BOLT



11/1/10 SP

Location

Loc Qty

Loc Code

ST345

53

113558

1

114653

12

115723

40

D2741

Manufactured

No

250

Each

35.0000

1

1



Blade, 350 Skidtube



11/1/10 SP

Location

Loc Qty

Loc Code

ST466

35

60210

35

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- 8) WELD PER DART QSI 004
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- 11) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

STANDARD
UNCLASSIFIED
SUBJECT
W. 10-10-13
NO. 62407
B/10-10-13

RELEASED
2010-09-15

A		NEW ISSUE		SC	10.08.09
REV		DESCRIPTION		BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC.			
DRAWN	SC	PORT HADLOCK, WA			
CHECKED		DRAWING NO.	D4168	REV. A	SHEET 1 OF 11
MFG. APPR.		TITLE	350 SKIDTUBE ASSEMBLY	SCALE	NTS
APPROVED		DATE 10.08.09			
DE APPR.		COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED BY THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

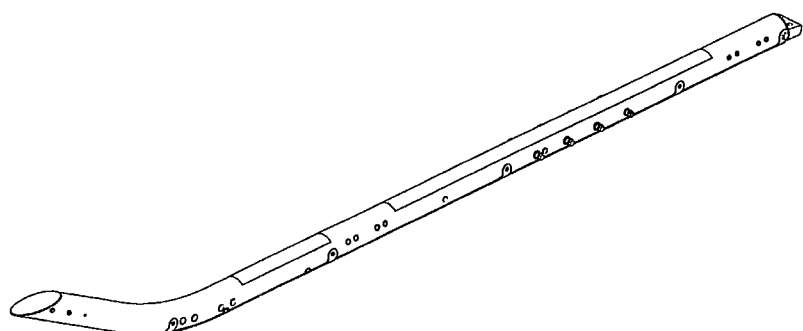
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

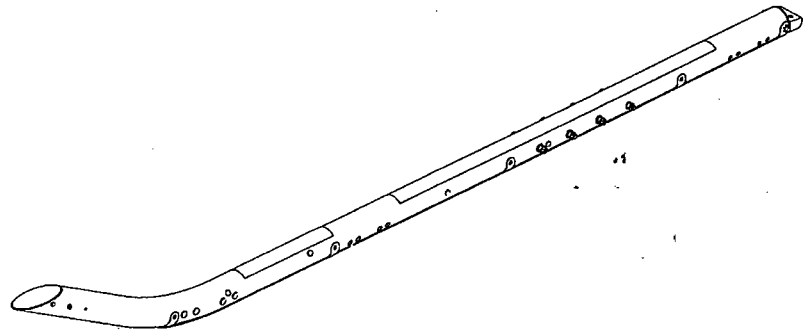
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D4168-041 350 SKIDTUBE ASSEMBLY, LH



D4168-042 350 SKIDTUBE ASSEMBLY, RH

W/L 629017

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2010-09-15
JW

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4168	SHEET 2 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

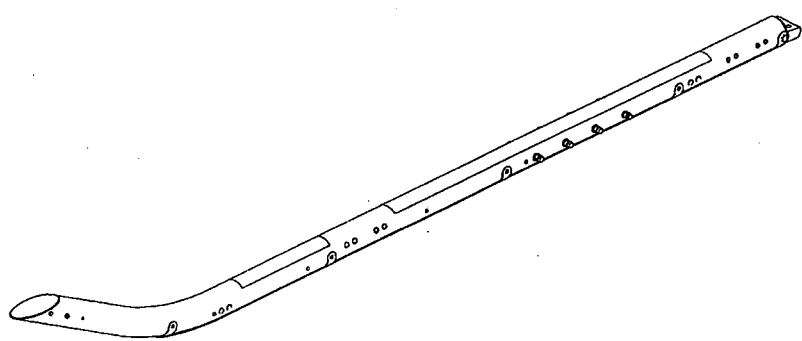
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

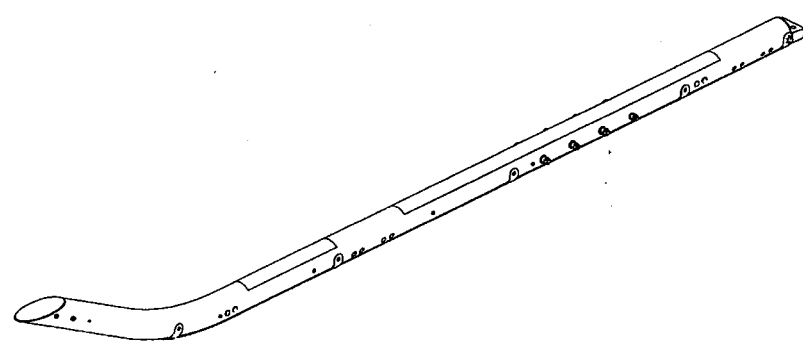
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

w/o 62441
62907



D4168-043 350 SKIDTUBE ASSEMBLY, LH



D4168-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
2010-09-15

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 3 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE 10.08.09		<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

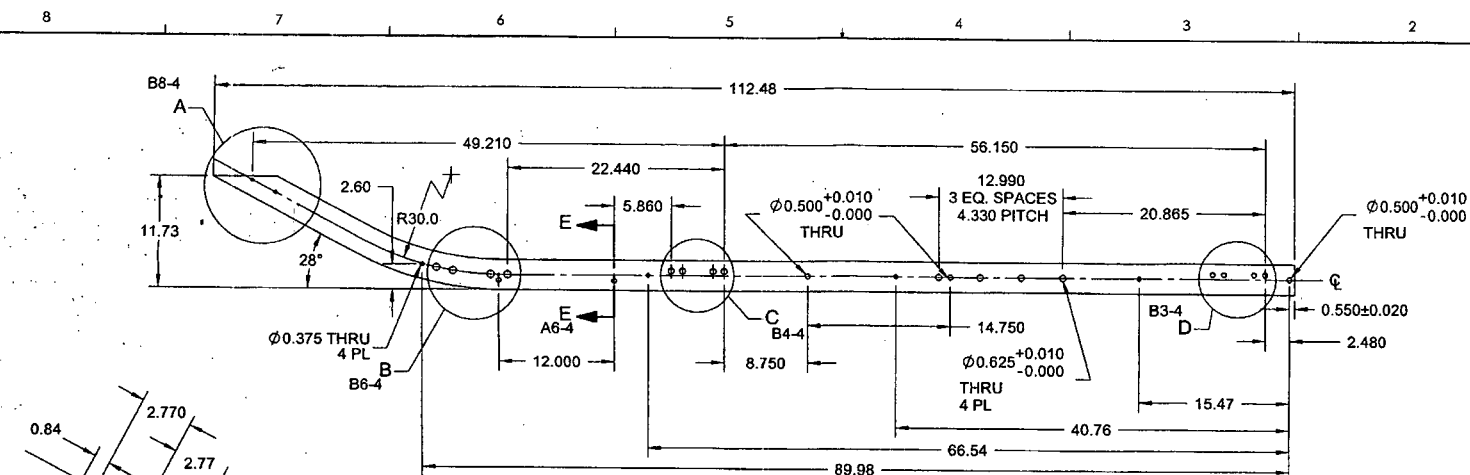
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

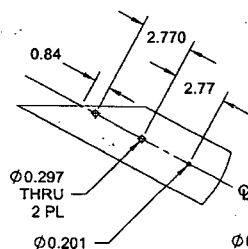
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

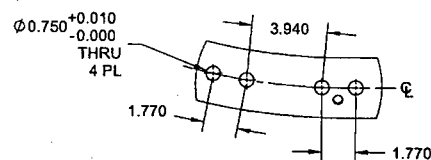
NOTE: Date & initial all entries



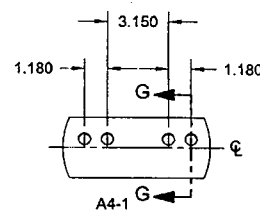
D4168-1 LH SKIDTUBE



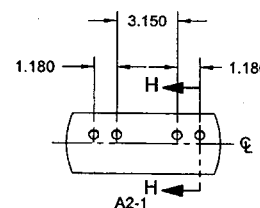
DETAIL A
SCALE 2X



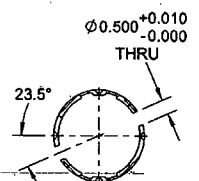
DETAIL B
SCALE 2X



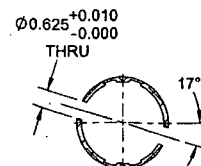
DETAIL C
SCALE 2X



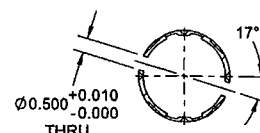
DETAIL D
SCALE 2X



SECTION E-E
SCALE 3X, 2 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	SC	DRAWING NO. D4168	REV. A
MFG. APPR.	SC	SHEET 4 OF 11	
APPROVED	SC	TITLE	SCALE
DE APPR.	SC	350 SKIDTUBE ASSEMBLY	
DATE	10.08.09	NTS	

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2010-09-15

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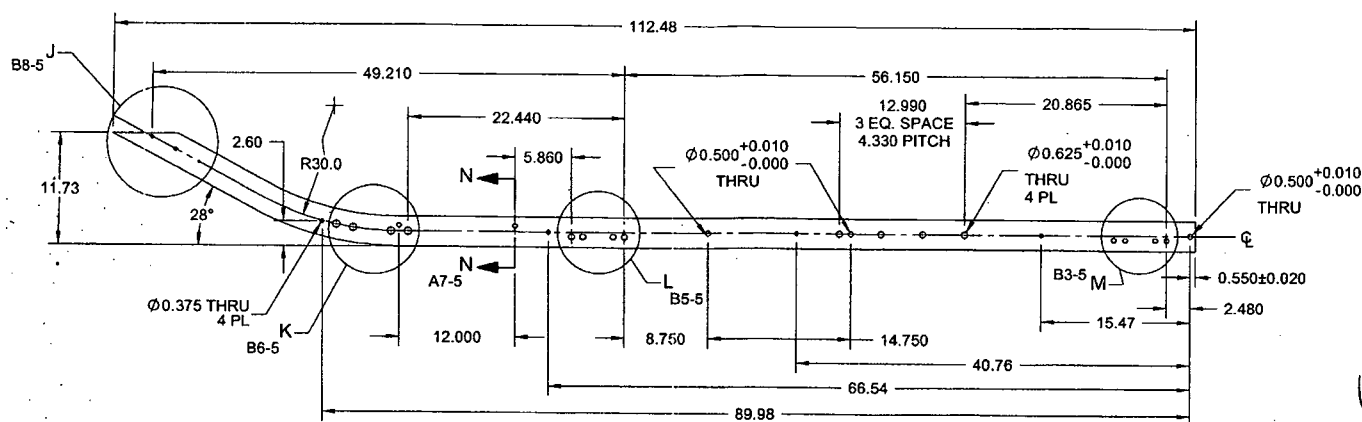
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

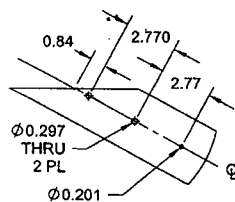
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

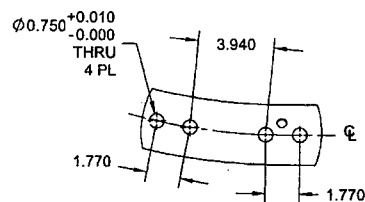
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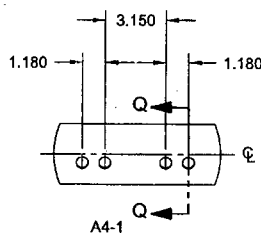
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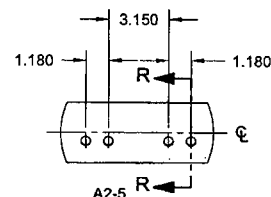
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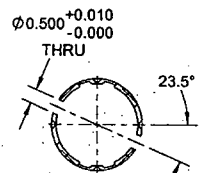
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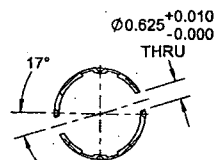
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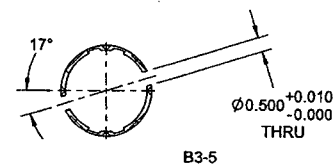
DETAIL M
SCALE 2X







SECTION N-N
SCALE 3X, 2 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

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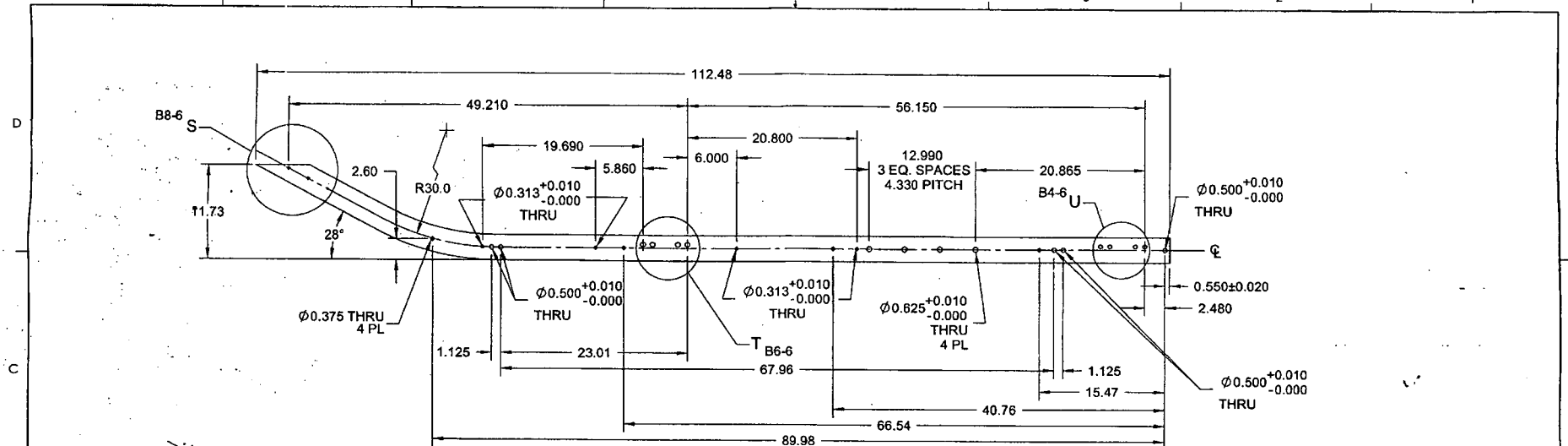
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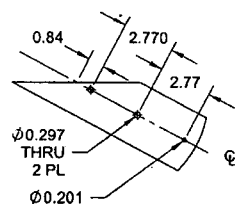
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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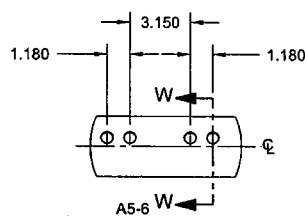
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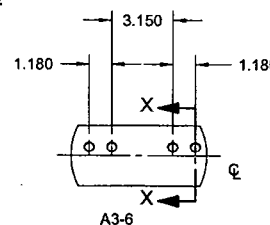
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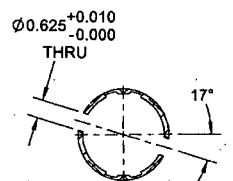
DETAIL S
SCALE 2X
D8-6



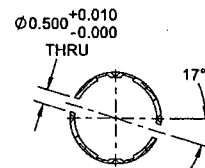
DETAIL T
SCALE 2X
C5-6



DETAIL U
SCALE 2X
D3-6



SECTION W-W
SCALE 3X, 4 PL
B6-6



SECTION X-X
SCALE 3X, 4 PL
B4-6

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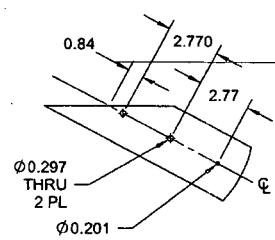
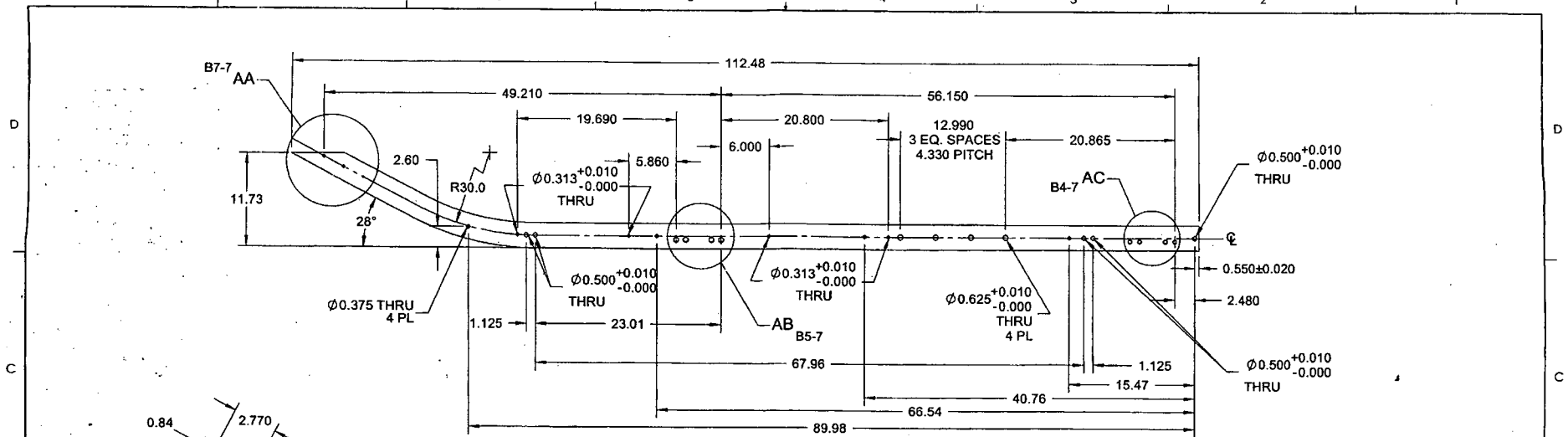
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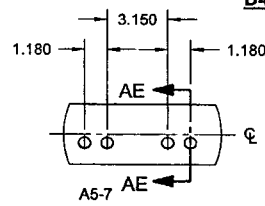
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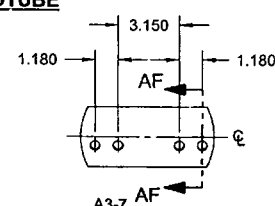
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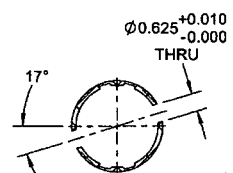
DETAIL AA
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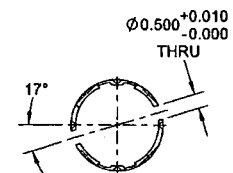
DETAIL AB
SCALE 2X



DETAIL AC
SCALE 2X



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

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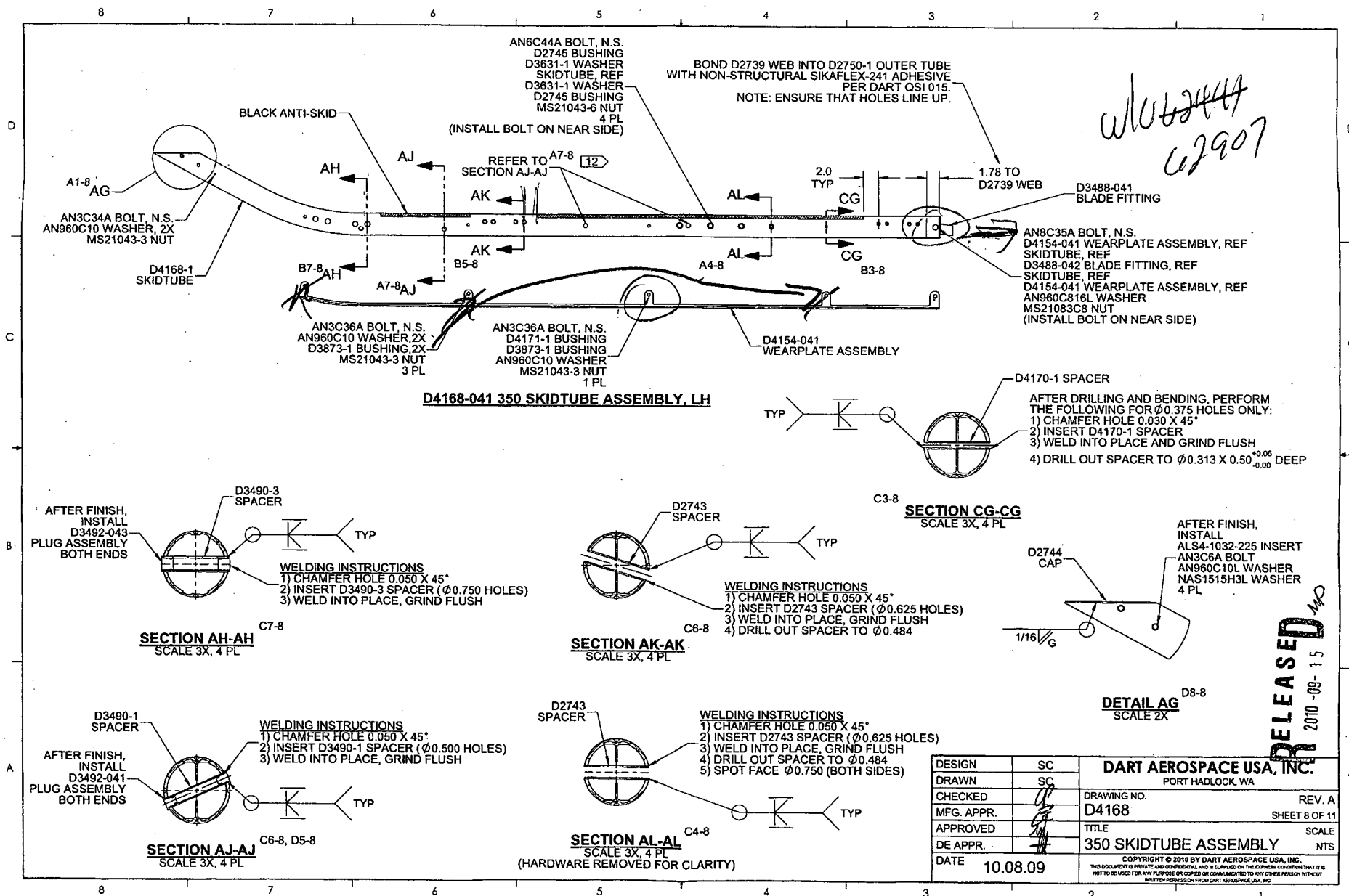
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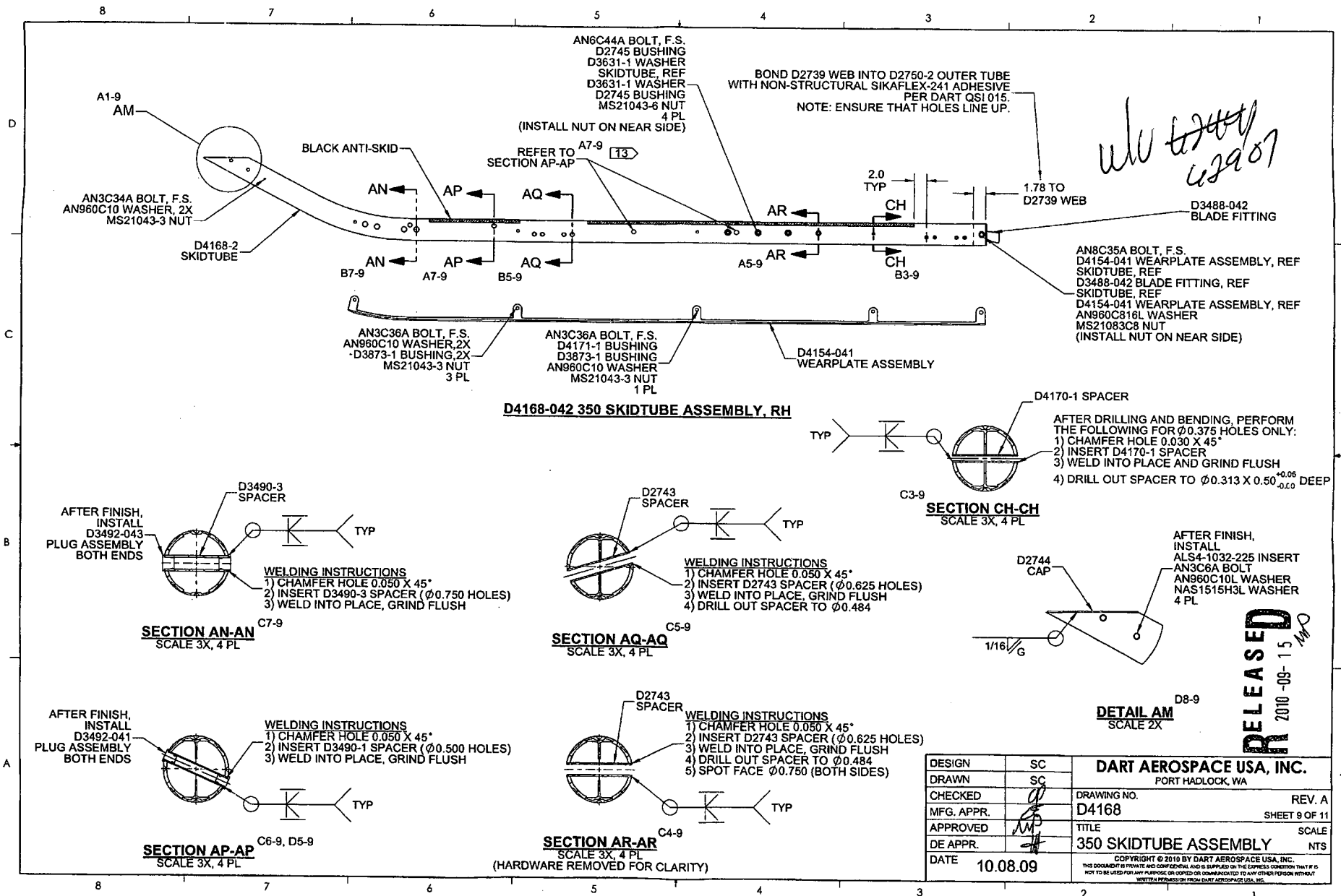
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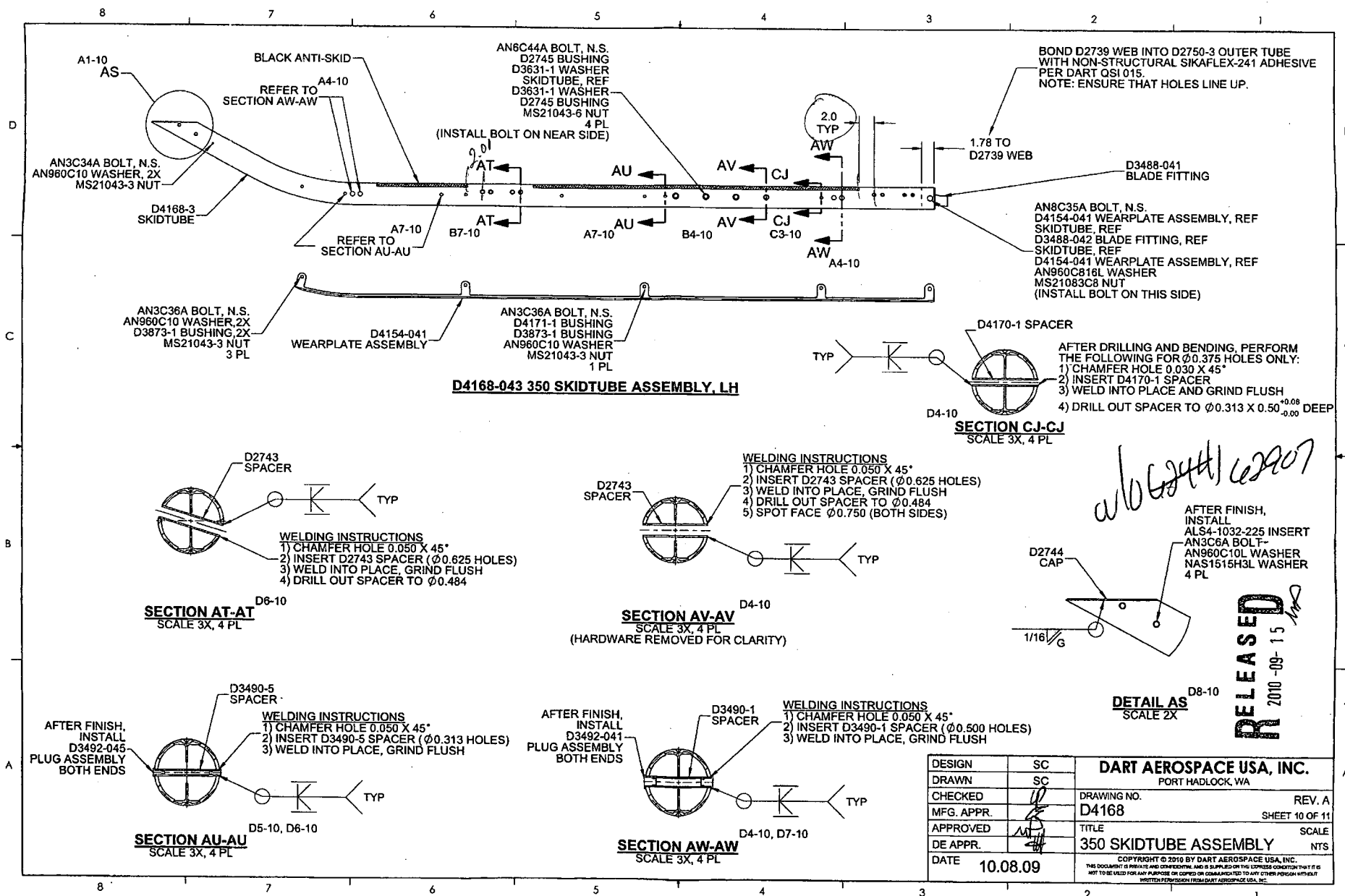
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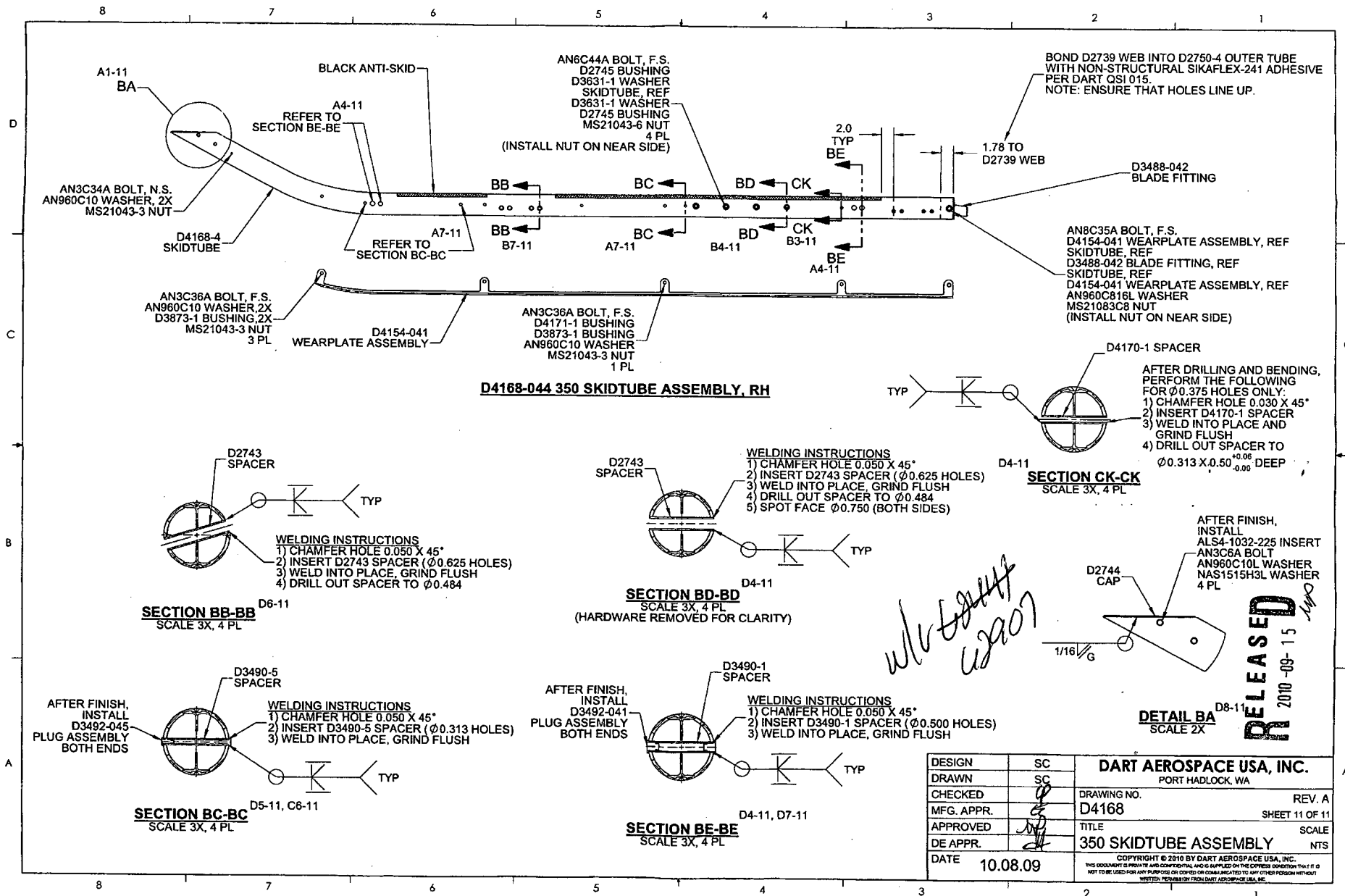
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